

EAST - [Untitled1]

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Active  
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(1159) rubber and silica and thiuram  
(617) (rubber and silica and thiuram) and guanidine  
(1209) "thiuram disulfide"  
(150) ((rubber and silica and thiuram) and guanidine) and "thiuram disulfide"  
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Tagged  
UDC  
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Trash

als : Synonyms  
Highlight all hit terms initially

((rubber and silica and thiuram) and

	U	I	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	R
142	<input type="checkbox"/>	<input type="checkbox"/>	US 3862078 A	19750121	41	PROCESS FOR CONVERTING COARSE AQUEOUS POLYMER	523/335	522/86 ; 523/343	
143	<input type="checkbox"/>	<input type="checkbox"/>	US 3857775 A	19741231	11	ELECTROLYTIC CELL INCLUDING A FLEXIBLE SHEET COVERING	204/252	204/242 ; 204/266	
144	<input type="checkbox"/>	<input type="checkbox"/>	US 3816323 A	19740611	6	PROCESS FOR THE VULCANIZATION OF NATURAL OR	502/167	525/332.7 ; 525/348	
145	<input type="checkbox"/>	<input type="checkbox"/>	US 3768537 A	19731030	10	TIRE	152/209.5	524/571 ; 524/575.5	
146	<input type="checkbox"/>	<input type="checkbox"/>	US 3719572 A	19730306	22	AQUEOUS LATICES OF HIGH POLYMER COMPOSITIONS AND	522/85	260/DIG.22 ; 366/147	
147	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 3673133 A	19720627	11	SYNTHETIC LATEX FOAM RUBBER AND METHOD OF MAKING SAME	521/66	260/DIG.22 ; 521/139	
148	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 3658637 A	19720425	6	DIALKYL OXALATE STABILIZATION OF POLYESTER	442/293	156/297 ; 428/480	
149	<input type="checkbox"/>	<input type="checkbox"/>	US 3644263 A	19720222	30	HIGH POLYMER LATICES AND	523/326	523/328	

Details

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FILE COVERS 1907 - 10 Oct 2002 VOL 137 ISS 15  
FILE LAST UPDATED: 9 Oct 2002 20021009/ED)

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```
=> s tetrabenzyl thiuram disulfide
      141 TETRABENZYL
      2 TETRABENZYLES
      144 TETRABENZYL
      (TETRABENZYL OF TETRABENZYLES)
      3115 THIURAM
      116 THIURAMS
      3311 THIURAM
      (THIURAM OR THIURAMS)
      37983 DISULFIDE
      12412 DISULFIDES
      92569 DISULFIDE
      (DISULFIDE OR DISULFIDES)
LI      7 TETRABENZYL THIURAM DISULFIDE
      TETRABENZYL(W THIURAM(W DISULFIDE)
```

=> a li 1-7 ti

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LI      ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI      Agent and method for removing harmful substances from combustion gases

LI      ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI      Rubber compositions and method for increasing the Mooney scorch value

LI      ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI      Balanced crosslink network created in natural rubber by using sulfenamide/
      tetrabenzyl thiuram disulfide cure system

LI      ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI      Balanced network with sulfenamide/tetrabenzyl thiuram
      disulfide (TBzTD)

LI      ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI      Recycling of hardened polysulfide and/or polymercaptan adhesives and
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sealants and products therefrom

LI ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS  
TI Rubber compositions with vibration-damping and low heat-buildup ability  
  
LI ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS  
TI A new safe thiuram, **tetrabenzyl thiuram disulfide**

END 11-1-1 all

LI ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS  
AN 2012:626063 CAPLUS  
LN 137:173921  
TI Agent and method for removing harmful substances from combustion gases  
IN Ikeda, Futoshi; Yasutake, Shigeo; Ikeda, Hiroaki; Sato, Katsuaki  
PA Ebara Corp., Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKKHAF  
IT Patent  
LA Japanese  
IC ICM 5012:13-76  
IC 5012:13-34; B01J020-20  
CC 50-4 Air Pollution and Industrial Hygiene

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
FI	JP 2002238734	A2	20010820	JP 2001-210756	20010711
PRAI	JP 2000-371598	A	20001207		
OS	MAEPAT 137:173921				

AB The agent for removing harmful substances from waste gases emitted out of combustion furnaces contains a dioxin treatment agent and a slaked lime powder. The dioxin treatment agent may be nitrobenzene derivs.; trimercaptotriazine alkali metal or alk. earth metal salts, ammonium salts, or amine salts; dithiocarbamic acid derivs. and their alkali metal or alk. earth metal salts, ammonium salts, amine salts, Zn or Ni salt; thiuram disulfide derivs.; peroxodisulfuric acid salts; and dithiocarbazine acid hydrazine salt derivs. Harmful substance removal is attained by adding the agent to waste gases emitted out of combustion furnaces to cause reaction between the agent and the harmful substances. The app. for the removal comprises a gas cooling app. for cooling the waste gases to a prescribed temp., an agent supply app. for supplying the agent to the cooled waste gases, a dust collecting app. for collecting dust from the resulting waste gases. Without requiring any spraying app. and adsorbing app., harmful substances, e.g. HCl, heavy metals, and dioxins can be removed.

ST combustion waste gas harmful substance detoxification; nitrobenzene trimercaptotriazine dithiocarbamate combustion gas treatment; thiuram disulfide peroxodisulfate combustion gas treatment; dithiocarbazine acid hydrazine combustion gas treatment; dioxin hydrochloric acid heavy metal removal

IT Ashes residues  
fly, detoxification of; harmful substance removal agent, method, and app. for waste gas detoxification

IT Combustion gases  
detoxification  
Waste gases  
harmful substance removal agent, method, and app. for waste gas detoxification

IT Heavy metals  
RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC

Process  
 (harmful substance removal agent, method, and app. for waste gas detoxification)

IT Hazardous materials  
 (removal of; harmful substance removal agent, method, and app. for waste gas detoxification)

IT 92-93-3, p-Nitrophenyl 94-27-1, Dipentamethylene thiuram disulfide 98-77-1 98-95-3D, Nitrobenzene, derivs. 99-99-0, p-Nitrotoluene 100-17-4, p-Methoxynitrobenzene 100-23-2, p-Dimethylaminonitrobenzene 128-64-1, Dimethyldithiocarbamic acid sodium salt 137-26-8, Tetramethyl thiuram disulfide 471-12-9D, Hydrazinecarbodithioic acid, derivs. 504-90-5L, Thiuram disulfide, derivs. 534-17-0D, Dithiocarbamic acid, derivs. 598-64-1, Dimethyldithiocarbamic acid dimethylamine salt 638-16-4D, Trimercaptotriazine, derivs. 7727-54-0 7775-27-1, Sodium peroxodisulfate 10591-85-2, **Tetrabenzyl thiuram disulfide** 13446-49-3D, Peroxodisulfuric acid, salts 16528-78-2, Dicyclohexyldithiocarbamic acid sodium salt 17766-26-6 1782-17-1, p-Nitrophenol, p-Nitrophenol 2014-59-6, Nitrophenol 4141-82-8 4170-18-2 4183-16-0 4183-17-3 5510-46-8 4261-51-2, Tetramethyl thiuram disulfide 7441-24-7 8341-11-1 8812-43-2 13181-99-1 448927-18-2 448927-19-3 448927-20-6 448927-21-7 448927-22-8 448927-23-9 448927-24-0 448927-25-1 448927-26-2 448927-27-3 448927-30-8 448927-32-0 448927-34-2 448927-36-4 448927-37-5 448927-39-7 448927-41-1

RL: TEM (Technical or engineered material use); USES (Uses)  
 (agent contg.; harmful substance removal agent, method, and app. for waste gas detoxification)

IT 132-64-8, Dibenzofuran 262-12-4, Dibenzo-p-dioxin  
 RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC  
 Process  
 (chloro deriva.; harmful substance removal agent, method, and app. for waste gas detoxification)

IT 1746-01-6, 2,3,7,8-Tetrachlorodibenzo-p-dioxin 7489-97-6, Mercury, processes 7647-01-0, Hydrochloric acid, processes  
 RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC  
 Process  
 (harmful substance removal agent, method, and app. for waste gas detoxification)

DI ANSWER L OF T CAPLUS COPYRIGHT 2001 ACS  
 AI 2001:9446 CAPLUS  
 IN 136:3971  
 TI Rubber compositions and method for increasing the Mooney scorch value  
 IN Hannon, Martin J.; Hong, Sung Wnee; Cornell, Robert J.  
 PA Uniroyal Chemical Company, Inc., USA  
 SC PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C08K005-40  
 ICS C08K003-36; C08L021-00  
 CC 39-9 (Synthetic Elastomers and Natural Rubber)  
 FANL CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094461	A1	20011213	WO 2001-US16155	20010517
	CL: BR, CA, CN, DE, ID, IN, JP, KR, MX, SK RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
FEAL	WO 2001094461 A 20010517				
AB	A rubber compn. is disclosed wherein the rubber compn. contains at least (a) a rubber component; (b) a silica filler; and, (c) at least one thiuram				

disulfide accelerator, it being provided that di-Ph guanidine is substantially absent in the rubber compn. The compns. may also include suitable amts. of other ingredients such as carbon black, coupling agents, antiozonants, antioxidants, etc. This, a rubber compn. composed of SBR rubber 75, butadiene rubber 25, carbon black 32, silica 44, Si69 3.52, arom. oil 31.50, stearic acid 1, p-phenylenediamine 2, hydrocarbon wax 1.00, zinc oxide 2.50, N-tert-butyl-2-benzothiazole sulfenamide 1.50, sulfur 2, and tetrasilyl (Cl2-14) thiuram disulfide Royalac 150 1.03 parts showed a Mooney Scorch (at 135.degree.) of 12 min, compared with 10 min for a compn. contg. 1 part of di-Ph guanidine instead of 1.13 part of Royalac 150.

- ST rubber compn silica thiuram disulfide accelerator; Mooney scorch rubber silica thiuram disulfide
- IT Carbon black, uses  
 RL: MDA (Modifier or additive use); USES (Uses)  
 (N234; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Synthetic rubber, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (butadiene-isoprene-styrene; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT synthetic rubber, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (butadiene-isoprene; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Coupling agents  
 Vulcanization accelerators and agents  
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Isoprene rubber, uses  
 Isoprene-styrene rubber  
 Natural rubber, uses  
 Neoprene rubber, uses  
 Nitrile rubber, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Butadiene rubber, properties  
 Styrene-butadiene rubber, properties  
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 10591-85-1, **Tetrabenzyl thiuram disulfide**  
 RL: MDA (Modifier or additive use); USES (Uses)  
 (Benzyl Tlex; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 10591-85-1  
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (butadiene rubber; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 15-94-6, Vinyltrichlorosilane 73-18-0, Vinyltriethoxysilane 919-30-2, .gamma.-Aminopropyltriethoxysilane 1067-83-4, Vinyltris(.beta.-methoxyethoxy)silane 1119-62-6 1760-24-3, N-.beta.-(Aminobenzyl)-.gamma.-aminopropyltrimethoxysilane 2530-83-8, .gamma.-Glycidioxypropyltrimethoxysilane 2530-85-0, .gamma.-Methacryloxypropyltrimethoxysilane 2530-87-2, .gamma.-Chloropropyltrimethoxysilane 2602-34-3, .gamma.-Glycidioxypropyltriethoxysilane 2768-02-7, Vinyltrimethoxysilane 2897-60-1, .gamma.-Glycidioxypropylmethyldiethoxysilane 3068-76-6, N-Phenyl-.gamma.-aminopropyltrimethoxysilane 3069-29-2, N-.beta.-(Aminoethyl)-.gamma.-aminopropylmethyldimethoxysilane 3388-04-3, .beta.-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane 4420-74-0,

.gamma.-Mercaptopropyltrimethoxysilane 5089-72-5 13822-56-5,  
.gamma.-Aminopropyltrimethoxysilane 14513-34-9, .gamma.-  
Methacryloxypropylmethyldimethoxysilane 21142-29-0, .gamma.-  
Methacryloxypropyltriethoxysilane 40372-72-3, Si63 65100-04-1,  
.gamma.-Methacryloxypropylmethyldiethoxysilane 113946-60-4 113946-66-0  
113988-64-4 113988-88-8

RI: MOA (Modifier or additive use); USES (Uses)  
(coupling agents; rubber compn. contg. silica and thiuram disulfide  
accelerator with increased Mooney scorch value)

IT 7631-16-8, Zecsil 1165, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(fillers; rubber compn. contg. silica and thiuram disulfide accelerator  
with increased Mooney scorch value)

IT 9003-31-0

FL: PDF (Polymer in formulation); USES (Uses)  
isoprene rubber, rubber compn. contg. silica and thiuram disulfide  
accelerator with increased Mooney scorch value)

IT 9003-31-0

FL: PDF (Polymer in formulation); USES (Uses)  
isoprene-styrene rubber, rubber compn. contg. silica and thiuram  
disulfide accelerator with increased Mooney scorch value)

IT 9010-98-1

RL: PDF (Polymer in formulation); USES (Uses)  
(neoprene rubber, rubber compn. contg. silica and thiuram disulfide  
accelerator with increased Mooney scorch value)

IT 9003-19-3

FL: PDF (Polymer in formulation); USES (Uses)  
(nitrile rubber, rubber compn. contg. silica and thiuram disulfide  
accelerator with increased Mooney scorch value)

IT 95-31-8, Delta NS 774-34-8, Sulfur, Uses 380373-67-6, Royalac 150

RL: MOA (Modifier or additive use); USES (Uses)  
(rubber compn. contg. silica and thiuram disulfide accelerator with  
increased Mooney scorch value)

IT 25102-51-7, Butadiene-isoprene copolymer 26602-62-0,

Butadiene-isoprene-styrene copolymer  
FL: PDF (Polymer in formulation); USES (Uses)  
(rubber; rubber compn. contg. silica and thiuram disulfide accelerator  
with increased Mooney scorch value)

IT 9003-31-0

FL: PDF (Polymer in formulation); PDF (Properties); USES (Uses)  
(styrene-butadiene rubber, rubber compn. contg. silica and thiuram  
disulfide accelerator with increased Mooney scorch value)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bridgestone Corp; EP 0479526 A 1992 CAPLUS

(2) Continental Ag; EP 0857751 A 1998 CAPLUS

(3) Usamoto, T; US 3706819 A 1972 CAPLUS

LI ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS

AN 2001:59:206 CAPLUS

IN 136:185137

TI Balanced crosslink network created in natural rubber by using sulfenamide/  
**tetrabenzyl thiuram disulfide** cure system

AU Datta, R.; Exbrink, B. Oude; Ingham, F.; Mori, T.

CS Neth.

SO Kautschuk Gummi Kunststoffe (2001), 54(11), 612, 614-617

CODEN: KAUKEA; I.S.N: 0022-8517

FE Huethig GmbH

LI Journal

LA English

CC 39-3 Synthetic Elastomers and Natural Rubber.

AB The possibility of an N-nitrosamine safe thiuram, **tetrabenzyl**

**thiuram disulfide** (TBzTD), is explored to obtain an improvement in cure efficiency together with a balanced network in typical natural rubber compds. A network study has been carried out in order to correlate cured properties to the fine structure of the vulcanizates.

ST natural rubber vulcanizing agent **tetrabenzyl thiuram disulfide** sulfenamide; structure natural rubber vulcanizate

IT Natural rubber; properties  
 RL: CPS (Chemical process); PEF (Physical, engineering or chemical process); PIS (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)  
 SMR-CV; balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system

IT Compression  
 Elongation; mechanical  
 Fatigue; mechanical  
 Hardness (mechanical)  
 Mechanical loss  
 Solubility  
 Tensile strength  
 Torque  
 Viscoelasticity  
 Vulcanization  
 Vulcanization accelerators and agents  
 balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system

IT 135-14-3, **Tetrabenzyl thiuram disulfide**  
 RL: MDA (Modifier or additive use); USES (Uses)  
 (Perkacit TBzTD; balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

IT 95-34-0, CBS 137-26-3, Perkacit TMTD 793-24-8, 6PPD 1314-13-2, Zinc oxide, uses  
 RL: MDA (Modifier or additive use); USES (Uses)  
 (balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

1. Amikari, B; Rubber Chem Technol 1983, V50, P327 CAPLUS
2. Datta, R; J Polym Materials 1998, V15, P379 CAPLUS
3. Datta, R; Kautschuk Gummi Kunststoffe 1999, V52, P758 CAPLUS
4. Ellis, B; Rubber Chem Technol 1964, V37, P571
5. Ferrandino, M; 147th meeting of Rubber division 1995
6. Flory, P; J Chem Phys 1943, V11, P571 CAPLUS
7. Krynowski, T; Rubber Chem Technol 1977, V50, P671 CAPLUS
8. Linwasser, H; Kautschuk Gummi Kunststoffe 1989, V42, P22
9. Morris, M; Rubber Chem Technol 1995, V68, P794 CAPLUS
10. Mullins, L; J Appl Polym Sci 1959, V2, P1 CAPLUS
11. Russell, R; Rubber Chem Technol 1969, V42, P418
12. Saville, B; Rubber Chem Technol 1967, V40, P100 CAPLUS
13. Schotman, A; Rubber Chem Technol 1996, V69, P727 CAPLUS
14. Seeberger, D; Flexsys Technical Bulletin
15. Seeberger, D; Kautschuk Gummi Kunststoffe 1989, V42, P27 CAPLUS

11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 1001:506913 CAPLUS

EN 136:71089

TI Balanced network with sulfenamide/**tetrabenzyl thiuram disulfide** (TBzTD)

AU Datta, R.; Mciri, T.

# Polysulfides

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(recycling of hardened polysulfides and/or polymercaptans by depolymer.)

## IT Adhesives

(two-component; recycling of hardened polysulfides and/or polymercaptans by depolymer. for)

## IT 1440-45-80, Chromium, salts, uses

RL: CAT (Catalyst use); NUU (other use, unclassified); USES (Uses)

(hexavalent; in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

## IT 62-16-60, Thiourea, derivs., uses 60-70-6 123-04-1, Sodium dimethyldithiocarbamate 136-13-2, Zinc dithyldithiocarbamate 137-26-8, Tetramethyl thiram disulfide 288-47-15, Thiapole, derivs. 1303-61-1, Lead dioxide 131-13-9, Manganese dioxide, uses 13591-85-2,

**Tetrabenzyl thiuram disulfide 14716-16-4,**

**Zinc dithyldithiocarbamate**

RL: CAT (Catalyst use); NUU (other use, unclassified); USES (Uses)

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

## IT 61-66-7, Benzyl butyl phthalate

RL: MOD (Modifier or additive use); USES (Uses)

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

## IT 160477-48-1, Terostat 298E

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(recycling of hardened polysulfides and/or polymercaptans by depolymer.)

LI ANSWER 6 OF 7 CASLUS COPYRIGHT 2002 ACS

AN 1996:1127.1 CASLUS

DN 114:114673

TI Rubber compositions with vibration-damping and low heat-buildup ability

IN Arita, Naomichi; Kokuyasni, Yukio; Taichi, Shigemitsu; Oohara, Masaki; Yamamoto, Tetsukimi

PA Ocul. Shinko Kagaku Kogyo Kk, Japan

SC Jpn. Kokai Tokkyo Koho, 11 pp.

COBEN: JPOH04F

DT Patent

LA Japanese

IC JPM 306136-1-10

ISS JPH01-5-19; 306K001-40; 306K001-57

CC 30-10 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06011676	A2	19960103	JP 1994-184108	19940704

OS MARPAT 114:114673

AB Title compns. contain thiurams (EIR2NCS)2Sx [R1, R2 = Ph, benzyl, C1-18 linear, branched, or cyclic alkyl, C5-8 alicyclic group residues or heterocyclic (other than N) residues; x = 1-6] C1-5.0, dialkyltin oxides R3R4SnO2n (R3, R4 = C1-8 alkyl, n .gtoreq.1 integers) C1-5.0, and/or Zn dithiocarbamates 0.1-5.0 phr. A natural rubber compn. contg. S 2, tetrastearylthiuram disulfide 1.38, and polymeric dioctyltin oxide 0.98 phr was vulcanized at 150.degree. for 10 min to form a product with a 13.degree. tan.delta. of 0.0610 and ratio of dynamic modulus at 100 Hz and 1 Hz of 1.040.

ST thiuram sulfide vulcanizer; dialkyltin oxide vulcanizer; zinc dithiocarbamate vulcanizer; heat buildup redn vulcanizer; vibration damper rubber vulcanizer

## IT Sulfides, uses

RL: CAT (Catalyst use); USES (Uses)



(mono- or poly-; rubber compns. with vibration-damping and low heat-buildup ability)

IT Rubber, butadiene-styrene, properties  
 Rubber, natural, properties  
 RL: PRF Properties  
 thiuram sulfide and/or zinc dithiocarbamate- and/or polymeric dialkyltin oxides contg. compns. with vibration damping and low heat-buildup ability

IT Vulcanization accelerators and agents  
 thiuram sulfides and/or zinc dithiocarbamates and/or (polymeric) dialkyltin oxides for rubber compns. with vibration-damping and low heat-buildup ability

IT 97-74-5, Tetramethylthiuram monosulfide 97-77-8, Tetraethylthiuram disulfide 136-23-2, Zinc dibutyldithiocarbamate 137-26-8 318-08-6 1634-02-2, Tetraethylthiuram disulfide 10591-85-2, **Tetrabenzyl thiuram disulfide** 13878-84-1 27517-48-2 17437-21-1, Tetrakis(2-ethylhexyl)thiuram disulfide 41365-24-6 62662-50-0, Tetrahexylthiuram disulfide 70605-35-5 175079-40-0  
 RL: CAT (Catalyst use); USES (Uses)  
 (rubber compns. with vibration-damping and low heat-buildup ability)

IT 9003-95-8  
 RL: PRF Properties  
 rubber, thiuram sulfide- and/or zinc dithiocarbamate- and/or polymeric dialkyltin oxides contg. compns. with vibration-damping and low heat-buildup ability

LI ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 AN 1991:141197 CAPLUS  
 DN 114:145197  
 TI A new safe thiuram, **tetrabenzyl thiuram disulfide**  
 AU Seeberger, D. B.  
 CS Akzo Chem., USA  
 SC Rubber World (1990), 201(5), 18-21  
 CODEN: RUBWA2; ISSN: 0035-9572  
 IT Journal  
 LA English  
 CC 19-10 (Synthetic Elastomers and Natural Rubber)  
 AB Tetrabenzylthiuram disulfide (I) contains only small quantities of its related nitrosamine, which is relatively nonvolatile and noncarcinogenic, and it does not readily form addnl. nitrosamine under normal vulcanization conditions nor during storage of its vulcanizates in absence of nitrosating agents. Although the mol. wt. of I is relatively high, its use in a rubber formulation in a 1:1 ratio by wt. in comparison to existing thiurams worked well when a small addnl. amt. of free S was added in vulcanization systems.  
 IT benzylthiuram disulfide vulcanization system safety  
 IT safety  
 (in vulcanization systems using tetrabenzylthiuram disulfide)  
 IT Vulcanization accelerators and agents  
 (tetrabenzylthiuram disulfide, safety and properties of)  
 IT 10591-85-2, Tetrabenzylthiuram disulfide  
 RL: USES (Uses)  
 (vulcanization agents, safety and properties of)

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 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
25.67	25.93

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
------------	-------

CA SUBSCRIBER PRICE

ENTRY	SESSION
-4.34	-4.34

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LAST RELEASED: Oct 4, 2002 (20021104,US).

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.00	25.94
DISCOUNT AMOUNTS FOR QUALIFYING ACCOUNTS:	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.34

FILE 'REGISTRY' ENTERED AT 13:11:10 ON 10 OCT 2002  
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STRUCTURE FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3  
DICTIONARY FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search term pricing does apply when  
conducting Smart/ELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNnote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnnotes27.pdf>

=> STR 11591-85-2

:END

L1 STRUCTURE CREATED

=> S L2 EXA SAN

SAMPLE SEARCH INITIATED 13:12:14 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

101.0 PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.01.02

FULL FILE PROJECTIONS:	ONLINE	** COMPLETE**
	BATCH	** COMPLETE**
PROJECTED ITERATIONS:	0 TO	0
PROJECTED ANSWERS:	0 TO	0

L2: SEA EXA SAM L2

NO ANSWERS WERE FOUND

=> FILE STINGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.90	27.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.14

FILE 'STINGUIDE' ENTERED AT 13:13:55 ON 10 OCT 2002  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELEASED: 1st 4, 2nd 2, 3rd 11, 4th 1.

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.44	29.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.14

FILE 'REGISTRY' ENTERED AT 13:23:31 ON 10 OCT 2002  
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STRUCTURE FILE UPDATES: \* OCT 1001 HIGHEST AN 403612-12-3  
SYNTHETIC FILE UPDATES: \* OCT 1001 HIGHEST AN 403612-12-3

TSOA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> STR 1-591-85-2

:END

L4 STRUCTURE CREATED

=> S L4 EXA FUL

FULL SEARCH INITIATED 13:28:35 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED 2 TO ITERATE

1 . PROCESSED 2 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

L5 2 SEA EXA FUL L4

==>

1. NAME:

L5 2 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Thioperoxydicarbonic diamide ([ (H2N)C(S)]2S2), tetrakis(phenylmethyl)-  
19CI

MF C30 H28 N2 S4

CH2 Ph

Ph CH2 N C S S C N CH2 Ph

S S CH2 Ph

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):none

ALL ANSWERS HAVE BEEN SCANNED

sealants and products therefrom  
 IN Grimm, Stefan; Pressel, Karl-Heinz; Proebster, Manfred  
 IA Teroson GmbH, Germany; Grimm, Stefan; Pressel, Karl-Heinz; Proebster, Manfred  
 SO ECT Int. Appl., 22 pp.  
 CODEN: ECTMPC  
 LA German  
 IC ICM C08J011-28  
 ICI 2481001-04  
 JC B3-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 39, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI	WO 9710253	A1	19970103	WO 1996-EP2488	19960607
	W: AU, BY, CA, CN, CZ, HU, JP, KR, NO, PL, RU, TR, UA, US				
	PW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19521671	C1	19970918	DE 1996-19521671	19960614
	CA 2224320	AA	19970103	CA 1996-2224390	19960607
	AU 9602257	A1	19971118	AU 1996-62257	19960607
	EP 882154	A1	19980401	EP 1996-920109	19960607
	EP 882154	B1	20111031		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
	JP 1181432	TE	19990231	JP 1996-502634	19960607
	AT 207948	E	20011118	AT 1996-920109	19960607
	CA 207948	A	19971118	CA 1996-2224390	19960607
	DE 19521671	A	19971118	DE 1996-19521671	19960607
	US 6117601	A	20000312	US 1996-933411	19960607
FR	DE 1996-19521671	A	19960614		
	WO 1996-EP2488	W	19960607		

AB Processing is carried out in a nonvolatile liq., with the adm. of a depolymer. agent, preferably a S-based vulcanization accelerator known from rubber technol. The depolymerizate can be added in high proportions to the hardener component of two-component polysulfide and/or polymercaptan adhesives, sealants or coating materials without substantially modifying its hardening characteristics or properties concerning stability during storage. The depolymer. agents may be in the form of thiazoles, thiurams, dithiocarbamates, dithiocarbamylsulfenamides, xanthates, S-contg. triazines, thioureas, etc. Examples were provided based on hardened Terostat 99R compns.

ST polysulfide recycling depolymer. adhesive sealant; rubber polysulfide depolymer. recycling; polymercaptan depolymer. recycling

IT Sealing compositions

1-component; recycling of hardened polysulfides and/or polymercaptans by depolymer.

IT Depolymerization

agents; in recycling of hardened polysulfides and/or polymercaptans

IT Recycling of plastics and rubbers

by depolymer. of hardened polysulfides and/or polymercaptans;

IT Crosslinking agents

Crosslinking catalysts

Plasticizers

Vulcanization accelerators and agents

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT Thiol- (organic), uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(polythiols, polymers; recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT Polysulfide rubber

CS Flexsys BV, Neth.  
 SO RubberChem '99, a Two-Day Conference, Antwerp, Belgium, Nov. 22-23, 1999  
 (1999), paper21/1-paper21/4 Publisher: Rapra Technology Ltd., Shrewsbury,  
 UK.  
 CODEN: 69BLQN  
 DT Conference  
 LA English  
 CC 39-10 (Synthetic Elastomers and Natural Rubber)  
 AB The effect of addn. of a N-nitrosamine safe thiuram, such as  
**tetrabenzyl thiuram disulfide** (TBzTD), as an  
 accelerator in natural rubber formulations was explored. The effect of  
 lower amt. of TBzTD was studied in sulfenamide cure to obtain better  
 balance of performance characteristics. The lower amt. of TBzTD generated  
 a network that contained an even distribution of mono- and polysulfides.  
 A crosslink study was done to correlate the properties to the structure of  
 the network.  
 IT property natural rubber **tetrabenzyl thiuram**  
**disulfide** as accelerator  
 IT Natural rubber, properties  
 RL: PCF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (SMR CV; effect of **tetrabenzyl thiuram**  
**disulfide** accelerator on properties of natural rubber  
 formulations)  
 IT Vulcanization accelerators and agents  
 (effect of sulfenamide, **tetrabenzyl thiuram**  
**disulfide** accelerator system on properties of natural rubber  
 formulations)  
 IT Crosslink density  
 (in natural rubber formulations contg. sulfenamide/**tetrabenzyl**  
**thiuram disulfide** accelerator system)  
 IT Abrasion  
 Compression  
 Elongation, mechanical  
 Fatigue, mechanical  
 Hardness (mechanical)  
 Loss modulus  
 Mechanical loss  
 Storage modulus  
 Tensile strength  
 Torque  
 Young's modulus  
 of natural rubber formulations contg. sulfenamide/**tetrabenzyl**  
**thiuram disulfide** accelerator system)  
 IT 10591-85-2, **Tetrabenzyl thiuram disulfide**  
 RL: CAT (Catalyst use); USES (Uses)  
 (effect of **tetrabenzyl thiuram disulfide**  
 accelerator on properties of natural rubber formulations)  
 IT 137-26-3, Tetramethyl thiuram disulfide  
 RL: CAT (Catalyst use); USES (Uses)  
 (effect of **tetrabenzyl thiuram disulfide**  
 accelerator on properties of natural rubber formulations and comparison  
 with)  
 IT 95-33-0, N-Cyclohexyl-2-benzothiazolesulfenamide  
 RL: CAT (Catalyst use); USES (Uses)  
 (effect of **tetrabenzyl thiuram disulfide**  
 and N-Cyclohexyl-2-benzothiazolesulfenamide accelerator system on  
 properties of natural rubber formulations)  
 DI ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 AN 1997:140176 CAPLUS  
 BN 126:145173  
 TI Recycling of hardened polysulfide and/or polymercaptan adhesives and